

Euphorbia glauca

sand spurge

EUPHORBIACEAE

Status

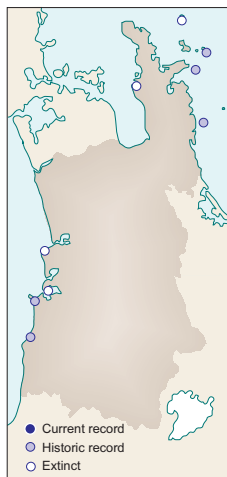
Serious Decline

Description

A succulent, creeping herb with upright, reddish tinged stems to 1 m tall. All parts of this plant exude a milky sap when damaged. The soft 10–120 × 15–25 mm long leaves are pale bluish green, cigar-shaped or elliptic in outline. These are often obscured by the conspicuous magenta-coloured inflorescence, which is made up of many minute, red, cup-like flowers, which have purple, crescent-shaped glands around their rim. The pendulous fruits of this species are 3-lobed capsules, which change from green to pale brown when ripe. Flowering occurs from October to February; fruiting from December to April.

Similar species

The milky sap distinguishes it from many other coastal herbs. The large cigar-shaped leaves and red cups around the flower-like inflorescences ('cyanthia') distinguish this species from other *Euphorbia* species.



Habitat

Open sand dunes, where it may form large sandy mounds; also occurs on coastal gravel banks and rocky bluffs.

Euphorbia glauca flower. Photo: S.P. Courtney.

Distribution

Endemic to New Zealand, occurring throughout North, South, Stewart and Chatham Islands. In the Waikato, it is known historically from the Kawhia Harbour, the Marokopa River mouth and from some islands off the Coromandel Peninsula; it is thought to be extinct on Cuvier Island, at Manaia Harbour and Whale Bay.

Threats

Disturbance by human and vehicle traffic on beaches; habitat degradation from browsing; overtopping by scrub weeds such as tree lupin.



Euphorbia glauca.
Photo: P. Knightbridge.

Gratiola nana

PLANTAGINACEAE

Status

Gradual Decline

Description

A small, fleshy, pale green, creeping herb with rounded leaves and large, solitary, tube-like flowers borne in the leaf axils. Leaves are in opposite pairs, and either very hairy or nearly hairless, pale green, sparingly toothed or notched with regular purple spots along their edges. Flowers are up to 12 mm long, with four white petals and a yellow throat with pink veins. Flowering occurs in November and fruiting in February.

Similar species

The other three species of *Gratiola* found in New Zealand differ in that they are upright, much taller herbs with larger leaves and generally smaller flowers. However, New Zealand *Gratiola* are very variable, and the distinction between depauperate forms of *G. sexdentata* and *G. nana* is not always clear.

Habitat

Muddy hollows in forest clearings, streambanks or in turf at the margins of lakes, rivers or ponds; sometimes aquatic at edge of shallow lakes or rivers.

Gratiola nana.

Photo: S.P. Courtney.



Distribution

Indigenous. Known in New Zealand from the North and South Islands but very local. In Waikato Conservancy, it is locally common in parts of the Hauhungaroa range but is apparently now extinct from the lowland sites it had been reported from in the 1980s. In Australia it is an uncommon plant, and forms matching the New Zealand plant have only been reliably reported from Tasmania.

Threats

Habitat loss through wetland drainage and competition from introduced weeds.

Hebe scopulorum

Awaroa koromiko

PLANTAGINACEAE

Status

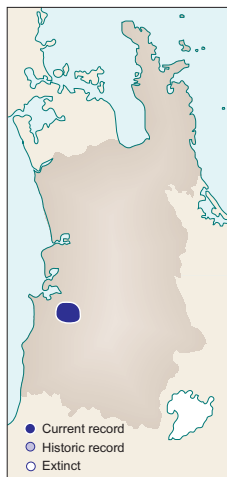
Nationally Vulnerable

Description

A densely branched, blue-grey shrub forming dense balls of vegetation $0.6(-1) \times (0.3-) 0.5 (0.7)$ m. When viewed from above, young leaf buds have a 4-pointed star-like shape. The distinctive blue-grey elliptic to lanceolate leaves are $20-44 \times 6-11$ mm, keeled in cross section with thickened edges. The corymbose inflorescences contain up to 40, pale mauve to white flowers. Flowers in October.

Similar species

Within the Waikato there are no similar species. *Hebe scopulorum* is amply distinct from the much taller *Hebe stricta* with which it sometimes grows. *H. stricta* has larger willow-green lance-shaped leaves and flowers carried on long pendulous racemes. The Awaroa koromiko is scarce in cultivation and has proved tricky to maintain, being very susceptible to fungal diseases.



Hebe scopulorum.

Photos: (left) B.D. Clarkson;
(right) P.J. de Lange.



Habitat

Confined to exposed limestone bluffs and rock outcrops.

Distribution

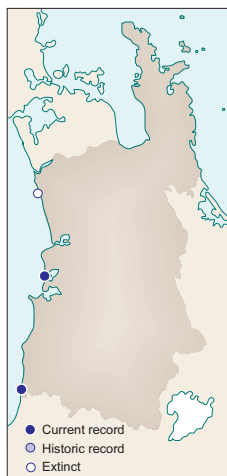
An extremely range-restricted New Zealand endemic, occurring south of Kawhia Harbour, where it is confined to half a dozen limestone rock outcrops.

Threats

Habitat loss through weed invasion, forest degradation and goat and possum browse.

Hebe speciosa

napuka/titirangi



PLANTAGINACEAE

Status

Nationally Endangered

Description

A low spreading shrub to 2 m tall. Leaves are in opposite pairs, with each successive pair at right angles to the previous one. Leaf blades are large, glossy, dark green, leathery and fleshy, broadly elliptic to oblong, 35 × 25–55 mm. The edges and midrib of young leaves are tinged red and finely hairy. Flowers are magenta in colour, up to 7 mm long and are carried in dense spikes up to 110 mm long by 30 mm in diameter. Flowering occurs from January to October. Capsules can be found throughout the year.

Similar species

Within the Waikato there are no naturally occurring species that could be confused with *Hebe speciosa*. However, being a very popular garden plant, there are a wide array of hybrids and cultivars growing in the region, and care is needed to distinguish those from any natural population of the hebe. From these, non-flowering specimens of *Hebe speciosa* may be recognised by the very broad, pale green, oblong leaves, whose margins are tinged red and are finely hairy.

Habitat

Sea cliffs and steep slopes, either in open sites or amongst low scrub. A very popular garden plant.

Distribution

Endemic to the northwestern North Island and Marlborough Sounds. In the Waikato, it is known from three sites on the west coast between Mokau and Port Waikato. Recent molecular evidence suggests that these Waikato sites are not natural and were planted by the Maori (Armstrong & de Lange, in press).

Threats

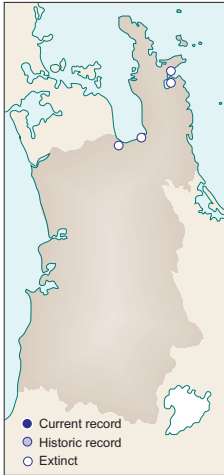
Habitat loss through erosion of the cliffs, browsing from domestic stock and possums and competition from weeds are the main threats. Insect damage also occurs. Hybridisation with nursery-sourced plants, hybrids and cultivars is a potential problem near residential areas.



Hebe speciosa.
Photo: A. Brandon.

Lepidium flexicaule

coastal cress



BRASSICACEAE

Status

Nationally Vulnerable

Description

A small, flat, creeping cress arising from a stout tap root. The numerous flowering stems are up to 250 mm long, with the stem margins finely denticulate (with small teeth). The bright yellow-green, fleshy 50 mm long rosette leaves are usually spoon-shaped, and deeply lobed, while the leaves associated with flowering stems are much smaller, strap-like, and deeply toothed. The flowers are small (2 mm), white, with 4 petals and four stamens, they are arranged in small spike-like racemes up to 50 mm long, which are often hidden amongst the foliage. The flattened, heart-shaped fruits (silicles) are to 4.5 by 3 mm long, each containing two orange-brown seeds. Flowering occurs from November to January and fruiting from December to March.

Similar species

This species is most often confused with winter cress *Lepidium (Coronopus) didymum* and *Lepidium (Coronopus) squamatum* which have similar, though more strongly pungent, foliage and seed capsules, and grow in much the same, though usually more modified habitats. Both species of winter cress differ from *L. flexicaule* in that their seed capsules are net-veined and/or covered in warty protuberances, and when they split they come away as two entire halves, never splitting by the valves and never leaving behind a replum.

Habitat

Coastal sites on bluffs, outcrops and amongst coastal turfs; often in association with nesting or roosting seabird sites.

Distribution

Australasian. In Australia confined to western Tasmania. In New Zealand recorded from the North and South Islands. In the North Island the species was historically present around Auckland, the Coromandel Peninsula, the Firth of Thames and possibly Wellington. A population was discovered on the South Taranaki coast in 2003. All the Waikato records pre-date the early 1900s and it is probably long extinct in the region. In the South Island, *L. flexicaule* survives in good numbers along the remote coastline from Cape Farewell to Greymouth.

Threats

Habitat loss through weed encroachment and development, browsing; susceptible to many of the pests and diseases of introduced brassicas, e.g., cabbage white butterfly, aphids, snails, white rust and diamondback moth.

Lepidium flexicaule.

Photos: (below, both)

R. Stanley;

(right) A.J. Townsend.

